Environmental Product Declaration

EPD of multiple products, based on a representative product in accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

VELA
ceiling / surface / suspended

from XAL GmbH

Including multiple variants of VELA
Included products are specified on page 4

Programme
The International EPD System
www.environdec.com

Programme operator
EPD International AB

EPD registration number	EPD-IES-0034274:001
Version date	2026-09-17
Validity date	2031-09-16

This EPD follows additional requirements for construction products considered as Electronic or Electric Equipment. An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com.

EPD INTERNATIONAL EPD SYSTEM

ECO PLATFORM EPD VERIFIED

Programme information

Programme	The International EPD System
Address	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website	www.environdec.com
E-mail	support@environdec.com

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR)
PCR 2019:14 Construction products version 2.0.1, 2025-06-05
UN CPC code(s): 4653 (Ver. 2.1) Lighting Equipment

PCR review was conducted by
The Technical Committee of the International EPD® System
Review Chair: Rob Rouwette (chair), Noa Meron (co-chair)
The review panel may be contacted via support@environdec.com.

Life Cycle Assessment (LCA) accountability
XAL GmbH, Auer-Welsbach-Gasse 36, 8055 Graz, Austria

Individual EPD verification without a pre-verified LCA/EPD tool
Third-party verifier:

Rubén Carnerero
IK Ingeniería
r.carnerero@ik-ingenieria.com

Procedure for follow-up of data during EPD validity involves third-party verifier:
☐Yes ☒No

Approved by
The International EPD® System

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

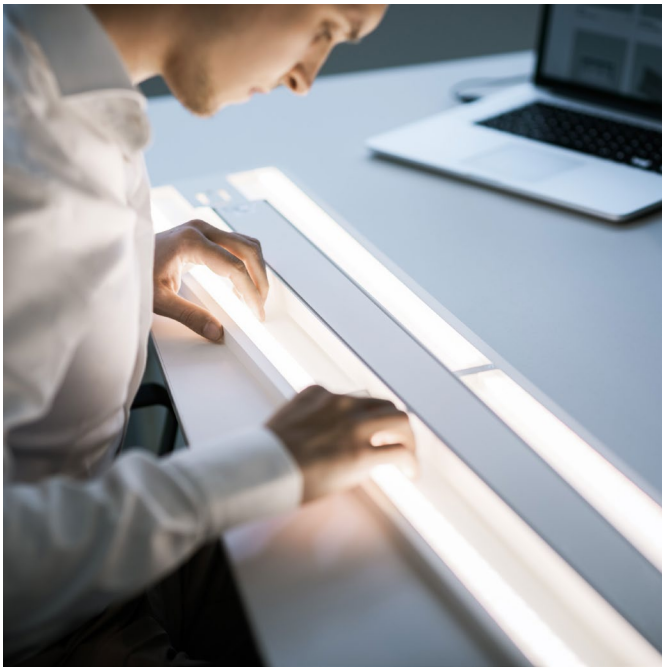
EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD

XAL GmbH
Auer-Welsbach-Gasse 36
8055 Graz
AUSTRIA

epd@xal.com



Description of the organisation

XAL is an internationally operating manufacturer of high-end luminaires and lighting solutions for shop, office, hotel and residential lighting. For 30 years, XAL has been working with lighting designers, architects and planners to develop custom luminaires of the highest technical standard, with a focus on style and aesthetics. While XAL mainly targets B2B costumers, we also provide our standard portfolio to B2C costumers.

With its headquarters in Graz, Austria, the XAL Group currently employs 1300 people worldwide and has 30 international subsidiaries. We are continuously working on improving our products in terms of durability, energy efficiency and carbon footprint, as well as the replaceability and reusability of components and materials. Improvements are assessed based on technical product specifications, product development documentation and, where applicable, life cycle assessments and Environmental Product Declarations (EPDs), allowing relevant environmental and product-related performance aspects to be substantiated and verified.

Product-related or management system-related certifications

XAL is certified according to several management and CSR standards.

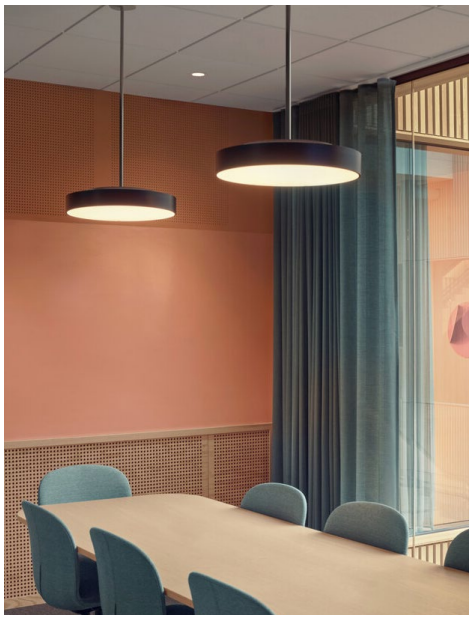
- **ISO 9001** – Quality management systems
- **ISO 14001** – Environmental management systems
- **ISO 45001** – Occupational health and safety management systems
- **Ecovadis** – regular evaluation of our corporate social responsibility based on objective criteria with a focus on the environment, labour and human rights, ethics and responsible procurement.
- **UN Global Compact initiative** – our interactions with each other and our stakeholders, our supply chain management and our resource strategies are guided by the principles of the UN Global compact.

Name and location of production site(s)
The production sites are located in Murska Sobota (XAL Svetila d.o.o., Slovenia) and in Graz (XAL GmbH, Austria).

The production facilities operate in a complementary manner, with each product passing through both facilities.

More information
xal.com

Product information



Product name

VELA ceiling/surface
VELA suspended

Product identification

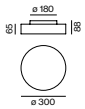
Ceiling/Surface/Suspended linear luminaires available in different sizes.

This EPD covers multiple products:
- **VELA** direct ceiling
- **VELA** direct surface
- **VELA** direct/indirect soft surface
- **VELA** direct suspended
- **VELA** direct/indirect power suspended (reference product)

All variants and their corresponding technical specifications are presented on the following pages under "Technical specifications".
The VELA 450 direct/indirect power suspended variant including rod suspension and tunable white option has been chosen as the reference product.

Scaling factors for all variants can be found in the Annex of the EPD.

Technical specifications



VELA 300 surface

TUNABLE WHITE | CRI ≥ 80 | UGR ≤ 19 | cd/m² ≤3000 | 220-240 V | 1 ADDR. | IP 40 | X-PERT | X-PERT

MICROPRISMATIC | DIRECT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
9.2 W	3000 K	979 lm	106 lm/W	0 7 3 - 1 1 3 1 5 ⬍ ◪ K
	4000 K	1040 lm	113 lm/W	0 7 3 - 1 1 3 1 6 ⬍ ◪ K
17.3 W	tunable w.	1760 lm	102 lm/W	0 7 3 - 1 1 3 2 D 3 ◪ K

OPAL | DIRECT CRI ≥ 80

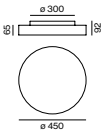
SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
9.2 W	3000 K	993 lm	108 lm/W	0 7 3 - 1 1 3 1 5 ⬍ ◪ O
	4000 K	1050 lm	114 lm/W	0 7 3 - 1 1 3 1 6 ⬍ ◪ O
16.5 W	3000 K	1700 lm	103 lm/W	0 7 3 - 1 1 3 2 5 ⬍ ◪ O
	4000 K	1800 lm	109 lm/W	0 7 3 - 1 1 3 2 6 ⬍ ◪ O
17.3 W	tunable w.	1790 lm	103 lm/W	0 7 3 - 1 1 3 2 D 3 ◪ O

MICROPRISMATIC | DIRECT / INDIRECT SOFT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
9.2 W	3000 K	↧1010/↥58 lm	116 lm/W	0 7 3 - 1 1 3 7 5 ⬍ ◪ K
	4000 K	↧1080/↥62 lm	124 lm/W	0 7 3 - 1 1 3 7 6 ⬍ ◪ K
17.3 W	tunable w.	↧1830/↥104 lm	112 lm/W	0 7 3 - 1 1 3 8 D 3 ◪ K

OPAL | DIRECT / INDIRECT SOFT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
9.2 W	3000 K	↧1050/↥51 lm	120 lm/W	0 7 3 - 1 1 3 7 5 ⬍ ◪ O
	4000 K	↧1110/↥54 lm	126 lm/W	0 7 3 - 1 1 3 7 6 ⬍ ◪ O
16.5 W	3000 K	↧1790/↥87 lm	114 lm/W	0 7 3 - 1 1 3 8 5 ⬍ ◪ O
	4000 K	↧1900/↥92 lm	121 lm/W	0 7 3 - 1 1 3 8 6 ⬍ ◪ O
17.3 W	tunable w.	↧1890/↥92 lm	114 lm/W	0 7 3 - 1 1 3 8 D 3 ◪ O



VELA 450 surface

TUNABLE WHITE | CRI ≥ 80 | UGR ≤ 19 | cd/m² ≤3000 | 220-240 V | 1 ADDR. | IP 40 | X-PERT | X-PERT

MICROPRISMATIC | DIRECT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
16.7 W	3000 K	2060 lm	123 lm/W	0 7 3 - 1 1 4 1 5 ⬍ ◪ K
	4000 K	2180 lm	131 lm/W	0 7 3 - 1 1 4 1 6 ⬍ ◪ K
30.0 W	tunable w.	3560 lm	119 lm/W	0 7 3 - 1 1 4 2 D 3 ◪ K

Order options

CONTROL ⬍	
non DIM	1
DALI-2	3

COLOUR ◪	
white aluminium RAL 9006	G
special colours	X
pure white RAL 9010	7
jet black RAL 9005	8

17.08.2026

Technical specifications

OPAL | DIRECT CRI ≥ 80

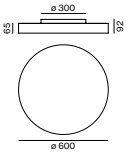
SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
16.7 W	3000 K	2050 lm	123 lm/W	0 7 3 - 1 1 4 1 5 ◪ O
	4000 K	2170 lm	130 lm/W	0 7 3 - 1 1 4 1 6 ◪ O
29.3 W	3000 K	3420 lm	117 lm/W	0 7 3 - 1 1 4 2 5 ◪ O
	4000 K	3620 lm	124 lm/W	0 7 3 - 1 1 4 2 6 ◪ O
30.0 W	tunable w.	3540 lm	118 lm/W	0 7 3 - 1 1 4 2 D 3 ◪ O

MICROPRISMATIC | DIRECT / INDIRECT SOFT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
16.7 W	3000 K	↧2040/↥83 lm	127 lm/W	0 7 3 - 1 1 4 7 5 ◪ K
	4000 K	↧2150/↥87 lm	134 lm/W	0 7 3 - 1 1 4 7 6 ◪ K
30.0 W	tunable w.	↧3520/↥142 lm	122 lm/W	0 7 3 - 1 1 4 8 D 3 ◪ K

OPAL | DIRECT / INDIRECT SOFT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
16.7 W	3000 K	↧2020/↥79 lm	126 lm/W	0 7 3 - 1 1 4 7 5 ◪ O
	4000 K	↧2150/↥84 lm	134 lm/W	0 7 3 - 1 1 4 7 6 ◪ O
29.3 W	3000 K	↧3380/↥132 lm	120 lm/W	0 7 3 - 1 1 4 8 5 ◪ O
	4000 K	↧3580/↥140 lm	127 lm/W	0 7 3 - 1 1 4 8 6 ◪ O
30.0 W	tunable w.	↧3500/↥137 lm	121 lm/W	0 7 3 - 1 1 4 8 D 3 ◪ O



VELA 600 surface

MICROPRISMATIC | DIRECT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
30.0 W	3000 K	4060 lm	135 lm/W	0 7 3 - 1 1 5 1 5 ◪ K
	4000 K	4300 lm	143 lm/W	0 7 3 - 1 1 5 1 6 ◪ K
51.0 W	tunable w.	6400 lm	125 lm/W	0 7 3 - 1 1 5 2 D 3 ◪ K

OPAL | DIRECT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
30.0 W	3000 K	4020 lm	134 lm/W	0 7 3 - 1 1 5 1 5 ◪ O
	4000 K	4250 lm	142 lm/W	0 7 3 - 1 1 5 1 6 ◪ O
47.0 W	3000 K	5930 lm	126 lm/W	0 7 3 - 1 1 5 2 5 ◪ O
	4000 K	6280 lm	134 lm/W	0 7 3 - 1 1 5 2 6 ◪ O
51.0 W	tunable w.	6340 lm	124 lm/W	0 7 3 - 1 1 5 2 D 3 ◪ O

MICROPRISMATIC | DIRECT / INDIRECT SOFT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
30.0 W	3000 K	↧4030/↥123 lm	138 lm/W	0 7 3 - 1 1 5 7 5 ◪ K
	4000 K	↧4260/↥130 lm	146 lm/W	0 7 3 - 1 1 5 7 6 ◪ K
51.0 W	tunable w.	↧6360/↥194 lm	128 lm/W	0 7 3 - 1 1 5 8 D 3 ◪ K

Order options

CONTROL	
non DIM	1
DALI-2	3

COLOUR	
white aluminium RAL 9006	G
special colours	X
pure white RAL 9010	7
jet black RAL 9005	8

17.08.2026

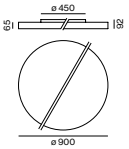
Technical specifications

OPAL | DIRECT / INDIRECT SOFT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
30.0 W	3000 K	↧3990/↥111 lm	137 lm/W	073-11575 ◪ O
	4000 K	↧4220/↥118 lm	145 lm/W	073-11576 ◪ O
47.0 W	3000 K	↧5900/↥165 lm	129 lm/W	073-11585 ◪ O
	4000 K	↧6240/↥174 lm	136 lm/W	073-11586 ◪ O
51.0 W	tunable w.	↧6290/↥176 lm	127 lm/W	073-1158D3 ◪ O

VELA 900 ceiling

TUNABLE WHITE | CRI ≥ 80 | UGR ≤ 19 | cd/m² ≤3000 | 220-240 V | DALI 1 ADDR. | IP 40 | X-PERT | X-PERT



MICROPRISMATIC | DIRECT CRI ≥ 80, DALI-2

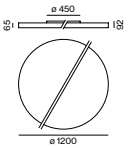
SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
67.0 W	3000 K	9020 lm	135 lm/W	073-11715 3 ◪ K
	4000 K	9560 lm	143 lm/W	073-11716 3 ◪ K
73.0 W	tunable w.	9470 lm	130 lm/W	073-1171D3 ◪ K

OPAL | DIRECT CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
67.0 W	3000 K	8990 lm	134 lm/W	073-11715 3 ◪ O
	4000 K	9520 lm	142 lm/W	073-11716 3 ◪ O
73.0 W	tunable w.	9430 lm	129 lm/W	073-1171D3 ◪ O

VELA 1200 ceiling

TUNABLE WHITE | CRI ≥ 80 | UGR ≤ 19 | cd/m² ≤3000 | 220-240 V | DALI 3 ADDR. | IP 40 | X-PERT | X-PERT



MICROPRISMATIC | DIRECT CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
147.0 W	3000 K	19400 lm	132 lm/W	073-11815 3 ◪ K
	4000 K	20500 lm	139 lm/W	073-11816 3 ◪ K
159.0 W	tunable w.	20300 lm	128 lm/W	073-1181D3 ◪ K

OPAL | DIRECT CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
147.0 W	3000 K	19400 lm	132 lm/W	073-11815 3 ◪ O
	4000 K	20600 lm	140 lm/W	073-11816 3 ◪ O
159.0 W	tunable w.	20400 lm	128 lm/W	073-1181D3 ◪ O

Mounting tools accessories (optional)

DISMOUNTING TOOL

TYPE	ORDER CODE
for ø600/900/1200	073-1100000

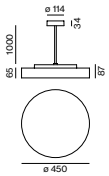
Order options

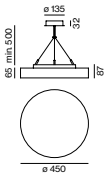
CONTROL ⬍	
non DIM	1
DALI-2	3

COLOUR ◪	
white aluminium RAL 9006	G
special colours	X
pure white RAL 9010	7
jet black RAL 9005	8

17.08.2026

Technical specifications





VELA 450 suspended

TUNABLE WHITE | CRI ≥ 80 | UGR ≤ 16 | cd/m² ≤3000 | 220-240 V | DALI 1 ADDR. | IP 40 | X-PERT | X-PERT

MICROPRISMATIC | DIRECT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
16.7 W	3000 K	2060 lm	123 lm/W	0 7 3 - 1 ♂ 4 1 5 ⇕ ◪ K
	4000 K	2180 lm	131 lm/W	0 7 3 - 1 ♂ 4 1 6 ⇕ ◪ K
30.0 W	tunable w.	3560 lm	119 lm/W	0 7 3 - 1 ♂ 4 2 D 3 ◪ K

OPAL | DIRECT CRI ≥ 80

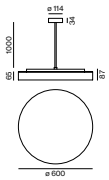
SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
16.7 W	3000 K	2050 lm	123 lm/W	0 7 3 - 1 ♂ 4 1 5 ⇕ ◪ O
	4000 K	2170 lm	130 lm/W	0 7 3 - 1 ♂ 4 1 6 ⇕ ◪ O
29.3 W	3000 K	3420 lm	117 lm/W	0 7 3 - 1 ♂ 4 2 5 ⇕ ◪ O
	4000 K	3620 lm	124 lm/W	0 7 3 - 1 ♂ 4 2 6 ⇕ ◪ O
30.0 W	tunable w.	3540 lm	118 lm/W	0 7 3 - 1 ♂ 4 2 D 3 ◪ O

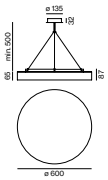
MICROPRISMATIC | DIRECT / INDIRECT POWER CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
21.1 W	3000 K	↧1960/↥767 lm	129 lm/W	0 7 3 - 1 ♂ 4 4 5 ⇕ ◪ K
	4000 K	↧2080/↥812 lm	137 lm/W	0 7 3 - 1 ♂ 4 4 6 ⇕ ◪ K
36.0 W	tunable w.	↧3210/↥1250 lm	124 lm/W	0 7 3 - 1 ♂ 4 5 D 3 ◪ K

OPAL | DIRECT / INDIRECT POWER CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
21.1 W	3000 K	↧1960/↥767 lm	129 lm/W	0 7 3 - 1 ♂ 4 4 5 ⇕ ◪ O
	4000 K	↧2070/↥812 lm	136 lm/W	0 7 3 - 1 ♂ 4 4 6 ⇕ ◪ O
35.0 W	3000 K	↧3060/↥1200 lm	122 lm/W	0 7 3 - 1 ♂ 4 5 5 ⇕ ◪ O
	4000 K	↧3250/↥1270 lm	129 lm/W	0 7 3 - 1 ♂ 4 5 6 ⇕ ◪ O
36.0 W	tunable w.	↧3190/↥1250 lm	123 lm/W	0 7 3 - 1 ♂ 4 5 D 3 ◪ O





VELA 600 suspended

TUNABLE WHITE | CRI ≥ 80 | UGR ≤ 19 | cd/m² ≤3000 | 220-240 V | DALI 1 ADDR. | IP 40 | X-PERT | X-PERT

MICROPRISMATIC | DIRECT CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
30.0 W	3000 K	4060 lm	135 lm/W	0 7 3 - 1 ♂ 5 1 5 ⇕ ◪ K
	4000 K	4300 lm	143 lm/W	0 7 3 - 1 ♂ 5 1 6 ⇕ ◪ K
51.0 W	tunable w.	6400 lm	125 lm/W	0 7 3 - 1 ♂ 5 2 D 3 ◪ K

Order options

MOUNTING	♂	CONTROL	⇕	COLOUR	◪
cable 1500 mm	2	non DIM	1	white aluminium RAL 9006	G
rod 1000 mm	4	DALI-2	3	special colours	X
				pure white RAL 9010	7
				jet black RAL 9005	8

17.08.2026

Technical specifications

OPAL | DIRECT CRI ≥ 80

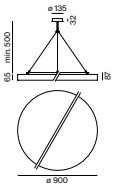
SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
30.0 W	3000 K	4020 lm	134 lm/W	0 7 3 - 1 5 1 5 O
	4000 K	4250 lm	142 lm/W	0 7 3 - 1 5 1 6 O
47.0 W	3000 K	5930 lm	126 lm/W	0 7 3 - 1 5 2 5 O
	4000 K	6280 lm	134 lm/W	0 7 3 - 1 5 2 6 O
51.0 W	tunable w.	6340 lm	124 lm/W	0 7 3 - 1 5 2 D 3 O

MICROPRISMATIC | DIRECT / INDIRECT POWER CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
44.0 W	3000 K	↧4150/↥1860 lm	137 lm/W	0 7 3 - 1 5 4 5 K
	4000 K	↧4390/↥1970 lm	145 lm/W	0 7 3 - 1 5 4 6 K
62.0 W	tunable w.	↧5690/↥2540 lm	133 lm/W	0 7 3 - 1 5 5 D 3 K

OPAL | DIRECT / INDIRECT POWER CRI ≥ 80

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
44.0 W	3000 K	↧4110/↥1860 lm	136 lm/W	0 7 3 - 1 5 4 5 O
	4000 K	↧4350/↥1970 lm	144 lm/W	0 7 3 - 1 5 4 6 O
62.0 W	tunable w.	↧5630/↥2540 lm	132 lm/W	0 7 3 - 1 5 5 D 3 O
66.0 W	3000 K	↧5930/↥2690 lm	131 lm/W	0 7 3 - 1 5 5 5 O
	4000 K	↧6280/↥2850 lm	138 lm/W	0 7 3 - 1 5 5 6 O



VELA 900 suspended

TUNABLE WHITE | CRI ≥ 80 | UGR ≤ 16 | cd/m² ≤3000 | 220-240 V | 1-2 ADDR. | IP 40 | X-PERT | X-PERT

MICROPRISMATIC | DIRECT CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
67.0 W	3000 K	9020 lm	135 lm/W	0 7 3 - 1 2 7 1 5 3 K
	4000 K	9560 lm	143 lm/W	0 7 3 - 1 2 7 1 6 3 K
73.0 W	tunable w.	9470 lm	130 lm/W	0 7 3 - 1 2 7 1 D 3 K

OPAL | DIRECT CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
67.0 W	3000 K	8990 lm	134 lm/W	0 7 3 - 1 2 7 1 5 3 O
	4000 K	9520 lm	142 lm/W	0 7 3 - 1 2 7 1 6 3 O
73.0 W	tunable w.	9430 lm	129 lm/W	0 7 3 - 1 2 7 1 D 3 O

MICROPRISMATIC | DIRECT / INDIRECT POWER CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
96.0 W	3000 K	↧9020/↥4410 lm	140 lm/W	0 7 3 - 1 2 7 4 5 3 K
	4000 K	↧9560/↥4670 lm	148 lm/W	0 7 3 - 1 2 7 4 6 3 K
105.0 W	tunable w.	↧9470/↥4760 lm	136 lm/W	0 7 3 - 1 2 7 4 D 3 K

Order options

MOUNTING	
cable 1500 mm	2
rod 1000 mm	4

CONTROL	
non DIM	1
DALI-2	3

COLOUR	
white aluminium RAL 9006	G
special colours	X
pure white RAL 9010	7
jet black RAL 9005	8

17.08.2026

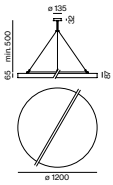
Technical specifications

OPAL | DIRECT / INDIRECT POWER CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
96.0 W	3000 K	↧8990/↥4410 lm	140 lm/W	0 7 3 - 1 2 7 4 5 3 ◪ O
	4000 K	↧9520/↥4670 lm	148 lm/W	0 7 3 - 1 2 7 4 6 3 ◪ O
105.0 W	tunable w.	↧9430/↥4760 lm	135 lm/W	0 7 3 - 1 2 7 4 D 3 ◪ O

VELA 1200 suspended

TUNABLE WHITE | CRI ≥ 80 | UGR ≤ 19 | cd/m² ≤3000 | 220-240 V | 3-4 ADDR. | IP 40 | X-PERT | X-PERT



MICROPRISMATIC | DIRECT CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
147.0 W	3000 K	19400 lm	132 lm/W	0 7 3 - 1 2 8 1 5 3 ◪ K
	4000 K	20500 lm	139 lm/W	0 7 3 - 1 2 8 1 6 3 ◪ K
159.0 W	tunable w.	20300 lm	128 lm/W	0 7 3 - 1 2 8 1 D 3 ◪ K

OPAL | DIRECT CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
147.0 W	3000 K	19400 lm	132 lm/W	0 7 3 - 1 2 8 1 5 3 ◪ O
	4000 K	20600 lm	140 lm/W	0 7 3 - 1 2 8 1 6 3 ◪ O
159.0 W	tunable w.	20400 lm	128 lm/W	0 7 3 - 1 2 8 1 D 3 ◪ O

MICROPRISMATIC | DIRECT / INDIRECT POWER CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
185.0 W	3000 K	↧19400/↥5730 lm	136 lm/W	0 7 3 - 1 2 8 4 5 3 ◪ K
	4000 K	↧20500/↥6060 lm	144 lm/W	0 7 3 - 1 2 8 4 6 3 ◪ K
199.0 W	tunable w.	↧20300/↥5890 lm	132 lm/W	0 7 3 - 1 2 8 4 D 3 ◪ K

OPAL | DIRECT / INDIRECT POWER CRI ≥ 80, DALI-2

SYSTEM	COLOUR TEMP.	LUM. FLUX	EFFICACY	ORDER CODE
185.0 W	3000 K	↧19400/↥5730 lm	136 lm/W	0 7 3 - 1 2 8 4 5 3 ◪ O
	4000 K	↧20600/↥6060 lm	144 lm/W	0 7 3 - 1 2 8 4 6 3 ◪ O
199.0 W	tunable w.	↧20400/↥5890 lm	132 lm/W	0 7 3 - 1 2 8 4 D 3 ◪ O

Order options

MOUNTING		CONTROL		COLOUR	
cable 1500 mm	2	non DIM	1	white aluminium RAL 9006	G
rod 1000 mm	4	DALI-2	3	special colours	X
				pure white RAL 9010	7
				jet black RAL 9005	9

Product description

VELA

Suspended
Round luminaire housing in aluminium, rolled profile, seamlessly welded; surface powder coated; suspended; with integrated toolless suspension height adjustment; incl. feeder cable or with height adjustable rod suspension (chrome), feed in rod; highly reflective coating of the PCB for improved efficiency; completely homogeneously illuminated, satinised PMMA cover; up to ø 600 mm: microprismatic PMMA cover; either with direct or direct / indirect light distribution; indirect light component with special PCBs for increased luminous flux and maximum ceiling illumination; energy-efficient LEDs with very good colour rendering; canopy with 2 cable openings and plug-in terminal for through wiring

Surface / Ceiling
Round luminaire housing in aluminium, rolled profile, seamlessly welded; surface powder coated; quick mounting system without tools; highly reflective coating of the PCB for improved efficiency; completely homogeneously illuminated, satinised PMMA cover; up to ø 600 mm: microprismatic PMMA cover; either with direct or direct / indirect light distribution; energy-efficient LEDs with very good colour rendering; luminaire with 2 cable openings and plug-in terminals for through wiring

Technical data was tested in house according to following standards:
- EN 13032-1: 2004 +A1: 2012
- EN 13032-4: 2015 +A1: 2019
- CIE S 025/E: 2015
- IES LM-79-19: 2019

UN CPC code(s):
- 4653 (Ver. 2.1) Lighting Equipment

Content declaration

The content declaration refers to the reference product.

Product content	Mass, kg	Mass-%	Post-consumer recycled material, mass-%	Biogenic material, mass-%	Biogenic material, kg C/product or declared unit
Metals	**2.82**	**61.70**	**0.00**	**0.00**	**0.00**
Aluminium	0.729	15.90	0.00	0.00	0.00
Steel	2.09	45.80	0.00	0.00	0.00
Plastics	**0.80**	**17.52**	**0.00**	**0.00**	**0.00**
PC	0.06	1.27	0.00	0.00	0.00
PET	0.08	1.64	0.00	0.00	0.00
PMMA	0.60	13.10	0.00	0.00	0.00
Powder Paint	0.06	1.25	0.00	0.00	0.00
TPU	0.01	0.26	0.00	0.00	0.00
Electronics	**0.79**	**17.20**	**0.00**	**0.00**	**0.00**
Cables	**0.16**	**3.41**	**0.00**	**0.00**	**0.00**
Others (<0.1%)	**0.01**	**0.17**	**0.00**	**0.00**	**0.00**
TOTAL	**4.58**	**100.00**	**0.00**	**0.00**	**0.00**

Packaging materials*	Mass, kg	Mass-% (versus the product)	Biogenic material, kg C/declared unit
Paper	0.70	15.3	0.35
Cardboard	0.03	0.68	0.02
TOTAL	**0.73**	**15.98**	**0.37**

The products do not contain any REACH and RoHS SVHC substances in amounts greater than 0.1 % (1000 ppm).

* Disclaimer: The packaging material table includes only product packaging. Transport packaging is also included in the LCA.

Declared unit

The declared unit is one piece of VELA 450 direct/indirect power suspended, tunable white variant including rod suspension. The weight of the product per declared unit is 4.58 kg.

For better comparison with other types of luminaires, conversion factors are also available to convert the results to 1000 lumens during a reference lifetime of 35000 hours. The conversion factors are available under “Additional environmental information“.

The principles of “modularity” and “polluter pays” have been followed.

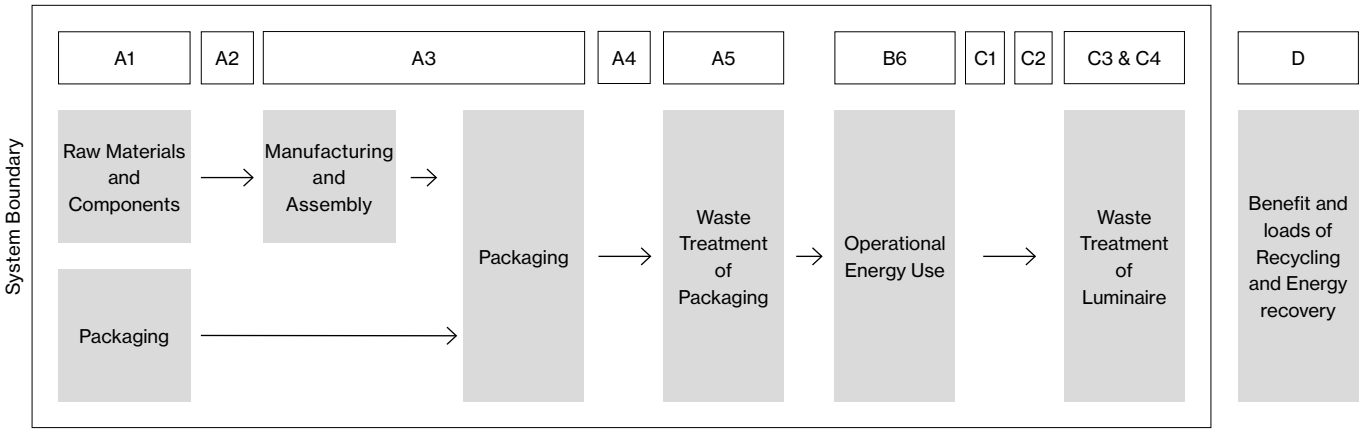
Reference service life
13.25 years

Time representativeness
2025

Database(s) and LCA software used
LCA for Experts 10.9.6.1

Description of system boundaries
Cradle to gate with options, modules C1-C4, module D and with optional modules A4, A5, B6.

System Diagram



Allocation

Raw materials are assigned directly based on the specific Bill of Materials. Factory-wide shared inputs such as electricity are allocated to products using internal sales data. Transport packaging is modelled using average packaging data.

Product stage (A1 – A3)

The raw materials and the corresponding manufacturing processes have been modelled using LCA for Experts. Transportation of raw materials, components and packaging materials to the production sites is included in the assessment. Average transport distances and appropriate transport modes have been applied. For components supplied from China, aggregated transport data has been used, as the supply chain involves various transport routes and vehicles.

The population of the PCB is carried out in Graz, Austria. Other manufacturing operations are mainly carried out in Murska Sobota, Slovenia. Electricity consumption for all manufacturing processes is modelled using the corresponding regional electricity mixes.

Following the EN 15804 cut-off approach, post-consumer recycled materials enters the system burden-free, with only recycling process impacts considered.

Transport to building (A4)

The transport is calculated from Graz, Austria to the capitals of the countries with sales shares >4%.

Weighted distance	740.4 km
Truck used	Class EURO 6, 26-28 t
Fuel type	Diesel (0.00287 l/100 km)

Installation into building (A5)

No emissions occur during the installation. This module includes the waste treatment of the packaging. Based on official statistics of Smart EPD Part A PCR, Standard 1000, version 1.2, waste treatment options are taken into account for Europe: Recycling (50%), Landfill (37%), Incineration (13%).

Packaging waste incl. transport packaging:

Material	Weight (kg)
Cardboard	1.54
Paper	0.03
Wooden Pallet	0.06
Plastics	0.06

Operational Energy Use (B6)

Electricity consumption during the use stage is modelled based on the technical parameters and reference service life of 13.25 years. The operating hours are based on the average application areas in accordance with EN 15193-1:2017+A1:2021. The products are mainly installed in shops, offices and other commercial premises. An average European Electricity grid mix has been used to calculate B6.

The electricity consumption per product unit is calculated using the formula: **Energy consumption [kWh] = {Pa × 1 kW / 1000 W x operating hours p/a [h] x reference service lifetime [y]}**

The results and additional Use Phase Information is presented in the table below:

Scenario	VELA 450 d/i suspended	Unit
Electricity use (13.25 years)	1526.53	kWh
Power	36.1	W
Operating hours (h/y)	3190	hours
Dimmable	DALI-2	-
Presence control	No	-

End-of-life stage (C1 – C4)

The product is presumed to be decomposed manually; therefore, no emissions occur in C1. In accordance with PCR 2.0.1, the following transport distances are used for end-of-life waste treatment:

- Waste not destined for incineration: 80 km
- Waste destined for incineration: 130 km

Based on official statistics of Smart EPD Part A PCR, Standard 1000, version 1.2, waste treatment options are taken into account for Europe: Recycling (50%), Landfill (37%), Incineration (13%).

Scenario	VELA 450 d/i suspended	Unit
Collected separately	4.58	kg
Collected with mixed (construction) waste	-	kg
For reuse	-	kg
For recycling	2.29	kg
For energy recovery	0.60	kg
For final disposal	1.69	kg

Module D

Calculations for Module D are made according to the guidelines of EN 15804+A2 and the PCR from EPD International. The loads and benefits result from the export of secondary materials and the energy which comes from incineration. In Module D also the benefits from the product packaging waste are included.

Scenario (contributing materials, incl. packaging)	VELA 450 d/i suspended	Unit
Materials for recycling	3.14	kg
Materials for export of secondary fuels	-	kg
Materials for incineration	0.81	kg

Cut-off rules

Consistent with the PCR, a minimum of 95% of total inflows (mass and energy) are included. In addition, materials and processes with insignificant contributions of less than 1% are also included. For the use and end-of-life stage, scenarios are used, factoring in geographical conditions (such as electricity mix) and applications (waste treatment practices).

The following processes have been excluded:
- Manufacture of equipment used in production, buildings or any other capital goods;
- The transportation of personnel to the plant;
- Transportation of personnel within the plant;
- Research and development activities;
- Long-term emissions.

The following modules have been excluded:
- B1: For the use stage (B1), no energy and material inputs, or emissions are involved.
- B2-B5: During the reference service life no maintenance (B2), repair (B3), replacement (B4) or refurbishment (B5) is expected.
- B7: The use of the product does not require water consumption (B7).

Data quality

This LCA study reflects the production for 2025. Components are sourced from external suppliers, and their manufacturing processes are modeled using LCA for Experts, applying the most suitable representative geographical conditions and applications. Geographical representativeness is global, mainly Europe. Data quality is very good / good.

Assumptions

The **VELA** ceiling/surface/suspended variants are highly similar and differ only in a limited number of components. Representative configurations containing the highest component content were selected to model the respective product families.

For **VELA 300**, direct/indirect soft surface variants with tunable white option were chosen as representative products. For **VELA 450, VELA 600, VELA 900, VELA 1200**, the direct/indirect power suspended variants with tunable white option were selected as the representative product. These configurations represent the worst-case scenario and cover all other variants within the respective product families.

Electricity grid

Electricity mix in manufacturing sites is modelled based on market-based approach. For the manufacturing in Graz, Austria, the corresponding supplier's residual electricity grid mix is used: Photovoltaic (84.08%), Hydro Power (10.07%) other RE (5.85%).

For Murska Sobota, Slovenia, the corresponding electricity grid mix is: Hydro Power (47.31%), Photovoltaic (51.51%) other RE (1.18%).

Environmental impact of the electricity used in	AUT	SLO
CO_2 eq. [kg/kWh]	0.022	0.019

Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	x	x	x	x	x	ND	ND	ND	ND	ND	x	ND	x	x	x	x	x
Geography	GLO	GLO	AUT, SLO	EUR	EUR	-	-	-	-	-	EUR	-	EUR	EUR	EUR	EUR	EUR
Primary data used	0.71%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	-58% / +628%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acronyms	GLO = Global, AUT = Austria, SLO = Slovenia, EUR = Europe																

Primary data used

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

Calculation of primary data used for module A1-A3:

Process	Source Type	Source	Reference Year	Data Category	Share of primary data of GWP-GHG results for A1-A3
Transport of materials to manufacturing site	Collected data	EPD Owner, Suppliers	2025	Primary data	0.70 %
Electricity of in-house manufacturing	Collected data	EPD Owner	2025	Primary data	0.015 %
Total share of primary data of GWP-GHG results for A1-A3					**0.71%**

Results of the environmental performance indicators

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3).

Mandatory impact category indicators according to EN 15804 + A2 (based on EF 3.1)

		Results per declared unit								
Indicator	**Unit**	**A1 – A3**	**A4**	**A5**	**B6**	**C1**	**C2**	**C3**	**C4**	**D**
GWP – total	kg CO_2 eq.	5.67E+01	7.35E-02	3.66E+00	5.15E+02	0.00E+00	4.22E-02	1.31E+00	3.63E-02	-8.63E+00
GWP – fossil	kg CO_2 eq.	5.95E+01	7.26E-02	5.46E-01	5.09E+02	0.00E+00	4.17E-02	1.31E+00	3.61E-02	-8.59E+00
GWP – biogenic	kg CO_2 eq.	-2.84E+00	5.71E-04	3.11E+00	5.20E+00	0.00E+00	3.28E-04	1.63E-03	1.48E-04	-3.08E-02
GWP – luluc	kg CO_2 eq.	6.53E-02	3.14E-04	1.50E-03	1.51E+00	0.00E+00	1.80E-04	4.48E-04	5.37E-05	-1.32E-02
ODP	kg CFC 11 eq.	1.10E-07	3.47E-14	2.94E-12	2.22E-08	0.00E+00	1.99E-14	6.06E-12	2.04E-13	-1.18E-10
AP	mol H+ eq.	2.82E-01	1.28E-04	1.33E-03	1.21E+00	0.00E+00	7.37E-05	9.12E-04	2.31E-04	-3.45E-02
EP – freshwater	kg P eq.	3.92E-03	1.86E-07	1.51E-05	5.34E-04	0.00E+00	1.07E-07	1.18E-06	5.75E-06	-1.36E-04
EP – marine	kg N eq.	5.53E-02	5.17E-05	7.00E-04	2.96E-01	0.00E+00	2.97E-05	3.21E-04	5.52E-05	-7.18E-03
EP – terrestrial	mol N eq.	6.05E-01	5.60E-04	5.60E-03	3.49E+00	0.00E+00	3.21E-04	3.83E-03	6.05E-04	-7.69E-02
POCP	kg NMVOC eq.	1.67E-01	1.17E-04	1.26E-03	6.93E-01	0.00E+00	6.69E-05	8.14E-04	1.71E-04	-2.14E-02
ADP – minerals & metals*	kg Sb eq.	2.03E-03	5.32E-09	3.77E-07	1.26E-04	0.00E+00	3.06E-09	5.25E-08	2.98E-09	-9.29E-05
ADP – fossil*	MJ	7.27E+02	9.60E-01	7.08E+00	9.51E+03	0.00E+00	5.51E-01	3.27E+00	5.75E-01	-1.20E+02
WDP*	m^3	1.06E+01	2.98E-04	8.68E-02	9.85E+01	0.00E+00	1.71E-04	1.95E-01	4.31E-03	-1.48E+00

Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

Additional mandatory and voluntary impact category indicators

		Results per declared unit								
Indicator	**Unit**	**A1 – A3**	**A4**	**A5**	**B6**	**C1**	**C2**	**C3**	**C4**	**D**
GWP – GHG[1]	kg CO_2 eq.	5.95E+01	7.29E-02	5.47E-01	5.10E+02	0.00E+00	4.19E-02	1.31E+00	3.62E-02	-8.60E+00
PM	disease inc.	2.88E-06	1.32E-09	9.60E-09	9.89E-06	0.00E+00	7.58E-10	8.46E-09	2.64E-09	-4.77E-07
IRP – HE**	kg U235-eq	2.41E+00	1.97E-04	2.50E-02	2.00E+02	0.00E+00	1.13E-04	5.15E-02	7.76E-04	-3.31E-01
ETP – fw*	CTUe	4.10E+02	8.25E-01	2.39E+00	2.23E+03	0.00E+00	4.74E-01	1.02E+00	6.45E-01	-3.67E+01
HTP – c*	CTUh	2.75E-08	1.64E-11	9.09E-11	1.50E-07	0.00E+00	9.40E-12	7.51E-11	1.47E-11	-7.66E-09
HTP – nc*	CTUh	6.06E-07	8.49E-10	8.66E-09	4.70E-06	0.00E+00	4.88E-10	3.83E-09	7.55E-10	-4.54E-08
SQP	dimensionless	4.78E+02	2.57E-01	7.30E+00	3.96E+03	0.00E+00	1.48E-01	1.17E+00	1.30E-01	-4.76E+01

Acronyms	PM = particulate matter emissions. IRP-HE = ionizing radiation potential-human exposure. ETP-fw = ecotoxicity (freshwater). HTP-c = human toxicity potential. cancer effects. HTP-nc = human toxicity potential. non-cancer effects. SQP = land use related impacts.

[1] The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

Results of the environmental performance indicators

Resource use indicators

For the indicators of renewable or non-renewable energy resource of PERM, PERT, PENRM and PENRT, option A is chosen for how to separate the use of primary energy into energy used as raw material and energy used as energy carrier based on Annex 3 of PCR 2019:14.

		Results per declared unit								
Indicator	**Unit**	**A1 – A3**	**A4**	**A5**	**B6**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	2.96E+02	6.83E-02	2.90E+01	7.27E+03	0.00E+00	3.92E-02	2.03E+00	1.00E-01	-5.75E+01
PERM	MJ	2.69E+01	0.00E+00	-2.69E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	3.23E+02	6.83E-02	2.01E+00	7.27E+03	0.00E+00	3.92E-02	2.03E+00	1.00E-01	-5.75E+01
PENRE	MJ	7.01E+02	9.60E-01	9.77E+00	9.51E+03	0.00E+00	5.51E-01	1.25E+01	5.75E-01	-1.20E+02
PENRM	MJ	2.65E+01	0.00E+00	-2.68E+00	0.00E+00	0.00E+00	0.00E+00	-9.25E+00	0.00E+00	0.00E+00
PENRT	MJ	7.27E+02	9.60E-01	7.08E+00	9.51E+03	0.00E+00	5.51E-01	3.27E+00	5.75E-01	-1.20E+02
SM	kg	1.02E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	3.30E-01	2.13E-05	4.85E-03	4.58E+00	0.00E+00	1.22E-05	5.18E-03	1.25E-04	-4.73E-02
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water									

Waste indicators

		Results per declared unit								
Indicator	**Unit**	**A1 – A3**	**A4**	**A5**	**B6**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	4.51E-07	4.44E-11	1.10E-07	1.43E-05	0.00E+00	2.55E-11	5.74E-08	1.32E-10	-5.76E-08
Non-hazardous waste disposed	kg	5.31E+00	1.85E-04	4.95E-01	8.25E+00	0.00E+00	1.06E-04	2.40E-01	1.69E+00	-1.61E+00
Radioactive waste disposed	kg	2.24E-02	1.51E-06	1.65E-04	1.31E+00	0.00E+00	8.67E-07	3.42E-04	6.08E-06	-3.14E-03

Output flow indicators

		Results per declared unit								
Indicator	**Unit**	**A1 – A3**	**A4**	**A5**	**B6**	**C1**	**C2**	**C3**	**C4**	**D**
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	6.76E-01	0.00E+00	8.45E-01	0.00E+00	0.00E+00	0.00E+00	2.29E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy. electricity	MJ	0.00E+00	0.00E+00	4.74E-01	0.00E+00	0.00E+00	0.00E+00	1.14E+00	0.00E+00	0.00E+00
Exported energy. thermal	MJ	0.00E+00	0.00E+00	8.59E-01	0.00E+00	0.00E+00	0.00E+00	2.54E+00	0.00E+00	0.00E+00

Additional LCA results

Results for additional 100% scenarios for End-of-Life modules per declared unit

Mandatory impact category indicators according to EN 15804 + A2 (based on EF 3.1)

		100% Recycling			100% Incineration			100% Landfill		
Indicator	**Unit**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**
GWP – total	kg CO_2 eq.	3.90E-02	9.31E-01	0.00E+00	6.34E-02	6.52E+00	0.00E+00	3.90E-02	0.00E+00	9.81E-02
GWP – fossil	kg CO_2 eq.	3.85E-02	9.27E-01	0.00E+00	6.26E-02	6.52E+00	0.00E+00	3.85E-02	0.00E+00	9.76E-02
GWP – biogenic	kg CO_2 eq.	3.03E-04	3.09E-03	0.00E+00	4.93E-04	6.79E-04	0.00E+00	3.04E-04	0.00E+00	3.99E-04
GWP – luluc	kg CO_2 eq.	1.67E-04	8.16E-04	0.00E+00	2.71E-04	3.09E-04	0.00E+00	1.67E-04	0.00E+00	1.45E-04
ODP	kg CFC 11 eq.	1.84E-14	1.15E-11	0.00E+00	3.00E-14	2.40E-12	0.00E+00	1.84E-14	0.00E+00	5.53E-13
AP	mol H+ eq.	6.81E-05	1.11E-03	0.00E+00	1.11E-04	2.75E-03	0.00E+00	6.82E-05	0.00E+00	6.26E-04
EP – freshwater	kg P eq.	9.90E-08	2.24E-06	0.00E+00	1.61E-07	4.98E-07	0.00E+00	9.90E-08	0.00E+00	1.55E-05
EP – marine	kg N eq.	2.75E-05	3.73E-04	0.00E+00	4.46E-05	1.04E-03	0.00E+00	2.75E-05	0.00E+00	1.49E-04
EP – terrestrial	mol N eq.	2.97E-04	4.38E-03	0.00E+00	4.83E-04	1.26E-02	0.00E+00	2.97E-04	0.00E+00	1.64E-03
POCP	kg NMVOC eq.	6.19E-05	9.25E-04	0.00E+00	1.01E-04	2.71E-03	0.00E+00	6.19E-05	0.00E+00	4.61E-04
ADP – minerals & metals*	kg Sb eq.	2.83E-09	9.69E-08	0.00E+00	4.59E-09	3.12E-08	0.00E+00	2.83E-09	0.00E+00	8.06E-09
ADP – fossil*	MJ	5.10E-01	5.66E+00	0.00E+00	8.28E-01	3.36E+00	0.00E+00	5.10E-01	0.00E+00	1.55E+00
WDP*	m^3	1.58E-04	1.83E-01	0.00E+00	2.58E-04	7.99E-01	0.00E+00	1.58E-04	0.00E+00	1.16E-02

Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

Additional mandatory and voluntary impact category indicators

		100% Recycling			100% Incineration			100% Landfill		
Indicator	**Unit**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**
GWP – GHG[1]	kg CO_2 eq.	3.87E-02	9.27E-01	0.00E+00	6.29E-02	6.52E+00	0.00E+00	3.87E-02	0.00E+00	9.77E-02
PM	disease inc.	7.01E-10	1.08E-08	0.00E+00	1.14E-09	2.36E-08	0.00E+00	7.01E-10	0.00E+00	7.13E-09
IRP – HE**	kg U235-eq	1.05E-04	9.94E-02	0.00E+00	1.70E-04	1.42E-02	0.00E+00	1.05E-04	0.00E+00	2.10E-03
ETP – fw*	CTUe	4.38E-01	1.56E+00	0.00E+00	7.13E-01	1.86E+00	0.00E+00	4.38E-01	0.00E+00	1.74E+00
HTP – c*	CTUh	8.69E-12	1.15E-10	0.00E+00	1.41E-11	1.35E-10	0.00E+00	8.69E-12	0.00E+00	3.97E-11
HTP – nc*	CTUh	4.51E-10	4.73E-09	0.00E+00	7.33E-10	1.13E-08	0.00E+00	4.51E-10	0.00E+00	2.04E-09
SQP	dimensionless	1.37E-01	2.12E+00	0.00E+00	2.22E-01	8.69E-01	0.00E+00	1.37E-01	0.00E+00	3.52E-01

Acronyms	PM = particulate matter emissions. IRP-HE = ionizing radiation potential-human exposure. ETP-fw = ecotoxicity (freshwater). HTP-c = human toxicity potential. cancer effects. HTP-nc = human toxicity potential. non-cancer effects. SQP = land use related impacts.

[1] The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

Additional LCA results

Resource use indicators

For the indicators of renewable or non-renewable energy resource of PERM, PERT, PENRM and PENRT, option A is chosen for how to separate the use of primary energy into energy used as raw material and energy used as energy carrier based on Annex 3 of PCR 2019:14.

		100% Recycling			100% Incineration			100% Landfill		
Indicator	**Unit**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**
PERE	MJ	3.63E-02	3.81E+00	0.00E+00	5.90E-02	9.59E-01	0.00E+00	3.63E-02	0.00E+00	2.72E-01
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	3.63E-02	3.81E+00	0.00E+00	5.90E-02	9.59E-01	0.00E+00	3.63E-02	0.00E+00	2.72E-01
PENRE	MJ	5.10E-01	1.43E+01	0.00E+00	8.28E-01	4.12E+01	0.00E+00	5.10E-01	0.00E+00	1.55E+00
PENRM	MJ	0.00E+00	-8.66E+00	0.00E+00	0.00E+00	-3.79E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	5.10E-01	5.66E+00	0.00E+00	8.28E-01	3.36E+00	0.00E+00	5.10E-01	0.00E+00	1.55E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	1.13E-05	5.44E-03	0.00E+00	1.84E-05	1.89E-02	0.00E+00	1.13E-05	0.00E+00	3.38E-04
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water									

Waste indicators

		100% Recycling			100% Incineration			100% Landfill		
Indicator	**Unit**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**
Hazardous waste disposed	kg	2.36E-11	1.14E-07	0.00E+00	3.83E-11	1.43E-09	0.00E+00	2.36E-11	0.00E+00	3.56E-10
Non-hazardous waste disposed	kg	9.82E-05	2.28E-01	0.00E+00	1.60E-04	9.69E-01	0.00E+00	9.82E-05	0.00E+00	4.58E+00
Radioactive waste disposed	kg	8.02E-07	6.55E-04	0.00E+00	1.30E-06	1.10E-04	0.00E+00	8.02E-07	0.00E+00	1.64E-05

Output flow indicators

		100% Recycling			100% Incineration			100% Landfill		
Indicator	**Unit**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**	**C2**	**C3**	**C4**
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	0.00E+00	4.58E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, electricity	MJ	0.00E+00	9.78E-01	0.00E+00	0.00E+00	5.01E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, thermal	MJ	0.00E+00	2.28E+00	0.00E+00	0.00E+00	1.08E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Scaling Factors for other variants

The scaling factors were determined using the GWP-GHG indicator and are only valid for this indicator.

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
VELA 300 direct/indirect soft surface	non DIM	9.2	Microprismatic	3000 K	116	0.42	0.32	0.32	0.26	0.32	0.48
	non DIM	9.2	Opal	3000 K	119	0.42	0.32	0.32	0.26	0.32	0.48
	DALI-2	9.2	Microprismatic	3000 K	116	0.42	0.32	0.32	0.26	0.32	0.48
	DALI-2	9.2	Opal	3000 K	119	0.42	0.32	0.32	0.26	0.32	0.48
	non DIM	9.2	Microprismatic	4000 K	124	0.42	0.32	0.32	0.26	0.32	0.48
	non DIM	9.2	Opal	4000 K	126	0.42	0.32	0.32	0.26	0.32	0.48
	DALI-2	9.2	Microprismatic	4000 K	124	0.42	0.32	0.32	0.26	0.32	0.48
	DALI-2	9.2	Opal	4000 K	126	0.42	0.32	0.32	0.26	0.32	0.48
	non DIM	16.5	Opal	3000 K	114	0.42	0.32	0.32	0.46	0.32	0.48
	DALI-2	16.5	Opal	3000 K	114	0.42	0.32	0.32	0.46	0.32	0.48
	non DIM	16.5	Opal	4000 K	120	0.42	0.32	0.32	0.46	0.32	0.48
	DALI-2	16.5	Opal	4000 K	120	0.42	0.32	0.32	0.46	0.32	0.48
	DALI-2	17.3	Microprismatic	tunable white	112	0.42	0.32	0.32	0.48	0.32	0.48
	DALI-2	17.3	Opal	tunable white	115	0.42	0.32	0.32	0.48	0.32	0.48
VELA 300 direct surface	non DIM	9.2	Microprismatic	3000 K	106	0.42	0.32	0.32	0.26	0.32	0.48
	non DIM	9.2	Opal	3000 K	108	0.42	0.32	0.32	0.26	0.32	0.48
	DALI-2	9.2	Microprismatic	3000 K	106	0.42	0.32	0.32	0.26	0.32	0.48
	DALI-2	9.2	Opal	3000 K	108	0.42	0.32	0.32	0.26	0.32	0.48
	non DIM	9.2	Microprismatic	4000 K	113	0.42	0.32	0.32	0.26	0.32	0.48
	non DIM	9.2	Opal	4000 K	114	0.42	0.32	0.32	0.26	0.32	0.48
	DALI-2	9.2	Microprismatic	4000 K	113	0.42	0.32	0.32	0.26	0.32	0.48
	DALI-2	9.2	Opal	4000 K	114	0.42	0.32	0.32	0.26	0.32	0.48
	non DIM	16.5	Opal	3000 K	103	0.42	0.32	0.32	0.46	0.32	0.48
	DALI-2	16.5	Opal	3000 K	103	0.42	0.32	0.32	0.46	0.32	0.48
	non DIM	16.5	Opal	4000 K	109	0.42	0.32	0.32	0.46	0.32	0.48
	DALI-2	16.5	Opal	4000 K	109	0.42	0.32	0.32	0.46	0.32	0.48
	DALI-2	17.3	Microprismatic	tunable white	102	0.42	0.32	0.32	0.48	0.32	0.48
	DALI-2	17.3	Opal	tunable white	104	0.42	0.32	0.32	0.48	0.32	0.48
VELA 450 direct/indirect soft surface	non DIM	16.7	Microprismatic	3000 K	127	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	16.7	Opal	3000 K	126	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Microprismatic	3000 K	127	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Opal	3000 K	126	1.00	1.00	1.00	0.46	1.00	1.00

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
	non DIM	16.7	Microprismatic	4000 K	134	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	16.7	Opal	4000 K	133	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Microprismatic	4000 K	134	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Opal	4000 K	133	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	29.3	Opal	3000 K	120	1.00	1.00	1.00	0.81	1.00	1.00
	DALI-2	29.3	Opal	3000 K	120	1.00	1.00	1.00	0.81	1.00	1.00
	non DIM	29.3	Opal	4000 K	127	1.00	1.00	1.00	0.81	1.00	1.00
	DALI-2	29.3	Opal	4000 K	127	1.00	1.00	1.00	0.81	1.00	1.00
	DALI-2	30	Microprismatic	tunable white	121	1.00	1.00	1.00	0.84	1.00	1.00
	DALI-2	30	Opal	tunable white	120	1.00	1.00	1.00	0.84	1.00	1.00
VELA 450 direct surface	non DIM	16.7	Microprismatic	3000 K	123	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	16.7	Opal	3000 K	123	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Microprismatic	3000 K	123	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Opal	3000 K	123	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	16.7	Microprismatic	4000 K	130	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	16.7	Opal	4000 K	130	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Microprismatic	4000 K	130	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Opal	4000 K	130	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	29.3	Opal	3000 K	117	1.00	1.00	1.00	0.81	1.00	1.00
	DALI-2	29.3	Opal	3000 K	117	1.00	1.00	1.00	0.81	1.00	1.00
	non DIM	29.3	Opal	4000 K	123	1.00	1.00	1.00	0.81	1.00	1.00
	DALI-2	29.3	Opal	4000 K	123	1.00	1.00	1.00	0.81	1.00	1.00
	DALI-2	30	Microprismatic	tunable white	117	1.00	1.00	1.00	0.84	1.00	1.00
	DALI-2	30	Opal	tunable white	117	1.00	1.00	1.00	0.84	1.00	1.00
VELA 450 direct/indirect power suspended	non DIM	21.1	Microprismatic	3000 K	129	1.00	1.00	1.00	0.59	1.00	1.00
	non DIM	21.1	Opal	3000 K	129	1.00	1.00	1.00	0.59	1.00	1.00
	DALI-2	21.1	Microprismatic	3000 K	129	1.00	1.00	1.00	0.59	1.00	1.00
	DALI-2	21.1	Opal	3000 K	129	1.00	1.00	1.00	0.59	1.00	1.00
	non DIM	21.1	Microprismatic	4000 K	137	1.00	1.00	1.00	0.59	1.00	1.00
	non DIM	21.1	Opal	4000 K	136	1.00	1.00	1.00	0.59	1.00	1.00
	DALI-2	21.1	Microprismatic	4000 K	137	1.00	1.00	1.00	0.59	1.00	1.00
	DALI-2	21.1	Opal	4000 K	136	1.00	1.00	1.00	0.59	1.00	1.00
	non DIM	35	Opal	3000 K	124	1.00	1.00	1.00	0.96	1.00	1.00

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
	DALI-2	35	Opal	3000 K	124	1.00	1.00	1.00	0.96	1.00	1.00
	non DIM	35	Opal	4000 K	131	1.00	1.00	1.00	0.96	1.00	1.00
	DALI-2	35	Opal	4000 K	131	1.00	1.00	1.00	0.96	1.00	1.00
(reference product)	**DALI-2**	**36**	**Micropris-matic**	**tunable white**	**123**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**
	DALI-2	36	Opal	tunable white	123	1.00	1.00	1.00	1.00	1.00	1.00
VELA 450 direct suspended	non DIM	16.7	Microprismatic	3000 K	123	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	16.7	Opal	3000 K	123	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Microprismatic	3000 K	123	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Opal	3000 K	123	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	16.7	Microprismatic	4000 K	130	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	16.7	Opal	4000 K	130	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Microprismatic	4000 K	130	1.00	1.00	1.00	0.46	1.00	1.00
	DALI-2	16.7	Opal	4000 K	130	1.00	1.00	1.00	0.46	1.00	1.00
	non DIM	29.3	Opal	3000 K	117	1.00	1.00	1.00	0.81	1.00	1.00
	DALI-2	29.3	Opal	3000 K	117	1.00	1.00	1.00	0.81	1.00	1.00
	non DIM	29.3	Opal	4000 K	123	1.00	1.00	1.00	0.81	1.00	1.00
	DALI-2	29.3	Opal	4000 K	123	1.00	1.00	1.00	0.81	1.00	1.00
	DALI-2	30	Microprismatic	tunable white	117	1.00	1.00	1.00	0.84	1.00	1.00
	DALI-2	30	Opal	tunable white	117	1.00	1.00	1.00	0.84	1.00	1.00
VELA 600 direct/indirect soft surface	non DIM	30	Microprismatic	3000 K	136	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	30	Opal	3000 K	135	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Microprismatic	3000 K	136	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Opal	3000 K	135	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	30	Microprismatic	4000 K	144	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	30	Opal	4000 K	143	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Microprismatic	4000 K	144	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Opal	4000 K	143	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	47	Opal	3000 K	128	1.76	1.46	1.45	1.31	1.56	1.32
	DALI-2	47	Opal	3000 K	128	1.76	1.46	1.45	1.31	1.56	1.32
	non DIM	47	Opal	4000 K	135	1.76	1.46	1.45	1.31	1.56	1.32
	DALI-2	47	Opal	4000 K	135	1.76	1.46	1.45	1.31	1.56	1.32
	DALI-2	51	Microprismatic	tunable white	128	1.76	1.46	1.45	1.41	1.56	1.32
	DALI-2	51	Opal	tunable white	127	1.76	1.46	1.45	1.41	1.56	1.32

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
VELA 600 direct surface	non DIM	30	Microprismatic	3000 K	134	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	30	Opal	3000 K	132	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Microprismatic	3000 K	134	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Opal	3000 K	132	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	30	Microprismatic	4000 K	141	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	30	Opal	4000 K	140	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Microprismatic	4000 K	141	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Opal	4000 K	140	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	47	Opal	3000 K	125	1.76	1.46	1.45	1.31	1.56	1.32
	DALI-2	47	Opal	3000 K	125	1.76	1.46	1.45	1.31	1.56	1.32
	non DIM	47	Opal	4000 K	133	1.76	1.46	1.45	1.31	1.56	1.32
	DALI-2	47	Opal	4000 K	133	1.76	1.46	1.45	1.31	1.56	1.32
	DALI-2	51	Microprismatic	tunable white	125	1.76	1.46	1.45	1.41	1.56	1.32
	DALI-2	51	Opal	tunable white	124	1.76	1.46	1.45	1.41	1.56	1.32
VELA 600 direct/indirect power suspended	non DIM	44	Microprismatic	3000 K	137	1.76	1.46	1.45	1.21	1.56	1.32
	non DIM	44	Opal	3000 K	136	1.76	1.46	1.45	1.21	1.56	1.32
	DALI-2	44	Microprismatic	3000 K	137	1.76	1.46	1.45	1.21	1.56	1.32
	DALI-2	44	Opal	3000 K	136	1.76	1.46	1.45	1.21	1.56	1.32
	non DIM	44	Microprismatic	4000 K	145	1.76	1.46	1.45	1.21	1.56	1.32
	non DIM	44	Opal	4000 K	144	1.76	1.46	1.45	1.21	1.56	1.32
	DALI-2	44	Microprismatic	4000 K	145	1.76	1.46	1.45	1.21	1.56	1.32
	DALI-2	44	Opal	4000 K	144	1.76	1.46	1.45	1.21	1.56	1.32
	non DIM	66	Opal	3000 K	131	1.76	1.46	1.45	1.82	1.56	1.32
	DALI-2	66	Opal	3000 K	131	1.76	1.46	1.45	1.82	1.56	1.32
	non DIM	66	Opal	4000 K	139	1.76	1.46	1.45	1.82	1.56	1.32
	DALI-2	66	Opal	4000 K	139	1.76	1.46	1.45	1.82	1.56	1.32
	DALI-2	62	Microprismatic	tunable white	132	1.76	1.46	1.45	1.72	1.56	1.32
	DALI-2	62	Opal	tunable white	131	1.76	1.46	1.45	1.72	1.56	1.32
VELA 600 direct suspended	non DIM	30	Microprismatic	3000 K	134	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	30	Opal	3000 K	132	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Microprismatic	3000 K	134	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Opal	3000 K	132	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	30	Microprismatic	4000 K	141	1.76	1.46	1.45	0.84	1.56	1.32
	non DIM	30	Opal	4000 K	140	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Microprismatic	4000 K	141	1.76	1.46	1.45	0.84	1.56	1.32
	DALI-2	30	Opal	4000 K	140	1.76	1.46	1.45	0.84	1.56	1.32

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
	non DIM	47	Opal	3000 K	125	1.76	1.46	1.45	1.31	1.56	1.32
	DALI-2	47	Opal	3000 K	125	1.76	1.46	1.45	1.31	1.56	1.32
	non DIM	47	Opal	4000 K	133	1.76	1.46	1.45	1.31	1.56	1.32
	DALI-2	47	Opal	4000 K	133	1.76	1.46	1.45	1.31	1.56	1.32
	DALI-2	51	Microprismatic	tunable white	125	1.76	1.46	1.45	1.41	1.56	1.32
	DALI-2	51	Opal	tunable white	124	1.76	1.46	1.45	1.41	1.56	1.32
VELA 900 direct ceiling	DALI-2	67	Microprismatic	3000 K	134	3.76	2.94	2.05	1.86	3.48	2.92
	DALI-2	67	Opal	3000 K	134	3.76	2.94	2.05	1.86	3.48	2.92
	DALI-2	67	Microprismatic	4000 K	142	3.76	2.94	2.05	1.86	3.48	2.92
	DALI-2	67	Opal	4000 K	142	3.76	2.94	2.05	1.86	3.48	2.92
	DALI-2	73	Microprismatic	tunable white	129	3.76	2.94	2.05	2.03	3.48	2.92
	DALI-2	73	Opal	tunable white	129	3.76	2.94	2.05	2.03	3.48	2.92
VELA 900 direct/indirect power suspended	DALI-2	96	Microprismatic	3000 K	140	3.76	2.94	2.05	2.66	3.48	2.92
	DALI-2	96	Opal	3000 K	140	3.76	2.94	2.05	2.66	3.48	2.92
	DALI-2	96	Microprismatic	4000 K	148	3.76	2.94	2.05	2.66	3.48	2.92
	DALI-2	96	Opal	4000 K	148	3.76	2.94	2.05	2.66	3.48	2.92
	DALI-2	105	Microprismatic	tunable white	135	3.76	2.94	2.05	2.91	3.48	2.92
	DALI-2	105	Opal	tunable white	135	3.76	2.94	2.05	2.91	3.48	2.92
VELA 900 direct suspended	DALI-2	67	Microprismatic	3000 K	134	3.76	2.94	2.05	1.86	3.48	2.92
	DALI-2	67	Opal	3000 K	134	3.76	2.94	2.05	1.86	3.48	2.92
	DALI-2	67	Microprismatic	4000 K	142	3.76	2.94	2.05	1.86	3.48	2.92
	DALI-2	67	Opal	4000 K	142	3.76	2.94	2.05	1.86	3.48	2.92
	DALI-2	73	Microprismatic	tunable white	129	3.76	2.94	2.05	2.03	3.48	2.92
	DALI-2	73	Opal	tunable white	129	3.76	2.94	2.05	2.03	3.48	2.92
VELA 1200 direct ceiling	DALI-2	147	Microprismatic	3000 K	132	6.29	4.64	3.36	4.06	5.56	4.34
	DALI-2	147	Opal	3000 K	132	6.29	4.64	3.36	4.06	5.56	4.34
	DALI-2	147	Microprismatic	4000 K	140	6.29	4.64	3.36	4.06	5.56	4.34
	DALI-2	147	Opal	4000 K	140	6.29	4.64	3.36	4.06	5.56	4.34
	DALI-2	159	Microprismatic	tunable white	128	6.29	4.64	3.36	4.39	5.56	4.34
	DALI-2	159	Opal	tunable white	129	6.29	4.64	3.36	4.39	5.56	4.34
VELA 1200 direct/indirect power suspended	DALI-2	185	Microprismatic	3000 K	136	6.29	4.64	3.36	5.12	5.56	4.34
	DALI-2	185	Opal	3000 K	136	6.29	4.64	3.36	5.12	5.56	4.34

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
	DALI-2	185	Microprismatic	4000 K	144	6.29	4.64	3.36	5.12	5.56	4.34
	DALI-2	185	Opal	4000 K	144	6.29	4.64	3.36	5.12	5.56	4.34
	DALI-2	199	Microprismatic	tunable white	132	6.29	4.64	3.36	5.50	5.56	4.34
	DALI-2	199	Opal	tunable white	132	6.29	4.64	3.36	5.50	5.56	4.34
VELA 1200 direct suspended	DALI-2	147	Microprismatic	3000 K	132	6.29	4.64	3.36	4.06	5.56	4.34
	DALI-2	147	Opal	3000 K	132	6.29	4.64	3.36	4.06	5.56	4.34
	DALI-2	147	Microprismatic	4000 K	140	6.29	4.64	3.36	4.06	5.56	4.34
	DALI-2	147	Opal	4000 K	140	6.29	4.64	3.36	4.06	5.56	4.34
	DALI-2	159	Microprismatic	tunable white	128	6.29	4.64	3.36	4.39	5.56	4.34
	DALI-2	159	Opal	tunable white	129	6.29	4.64	3.36	4.39	5.56	4.34

Results for 1000 lumens during a reference life of 35000 hours
(As per reference of PEP-ECO Passport PSR-0014-ed2.0-EN-2023 07 13).

A conversion factor can be used for converting the results to 1000 lumens during a reference life of 35000 hours.

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
VELA 300 direct/indirect soft surface	non DIM	9.2	Microprismatic	3000 K	116	0.93	0.93	0.93	0.79	0.93	0.93
	non DIM	9.2	Opal	3000 K	119	0.91	0.91	0.91	0.77	0.91	0.91
	DALI-2	9.2	Microprismatic	3000 K	116	0.93	0.93	0.93	0.79	0.93	0.93
	DALI-2	9.2	Opal	3000 K	119	0.91	0.91	0.91	0.77	0.91	0.91
	non DIM	9.2	Microprismatic	4000 K	124	0.88	0.88	0.88	0.74	0.88	0.88
	non DIM	9.2	Opal	4000 K	126	0.86	0.86	0.86	0.73	0.86	0.86
	DALI-2	9.2	Microprismatic	4000 K	124	0.88	0.88	0.88	0.74	0.88	0.88
	DALI-2	9.2	Opal	4000 K	126	0.86	0.86	0.86	0.73	0.86	0.86
	non DIM	16.5	Opal	3000 K	114	0.53	0.53	0.53	0.45	0.53	0.53
	DALI-2	16.5	Opal	3000 K	114	0.53	0.53	0.53	0.45	0.53	0.53
	non DIM	16.5	Opal	4000 K	120	0.50	0.50	0.50	0.42	0.50	0.50
	DALI-2	16.5	Opal	4000 K	120	0.50	0.50	0.50	0.42	0.50	0.50
	DALI-2	17.3	Microprismatic	tunable white	112	0.52	0.52	0.52	0.44	0.52	0.52
	DALI-2	17.3	Opal	tunable white	115	0.51	0.51	0.51	0.43	0.51	0.51
VELA 300 direct surface	non DIM	9.2	Microprismatic	3000 K	106	1.02	1.02	1.02	0.86	1.02	1.02
	non DIM	9.2	Opal	3000 K	108	1.01	1.01	1.01	0.85	1.01	1.01
	DALI-2	9.2	Microprismatic	3000 K	106	1.02	1.02	1.02	0.86	1.02	1.02
	DALI-2	9.2	Opal	3000 K	108	1.01	1.01	1.01	0.85	1.01	1.01
	non DIM	9.2	Microprismatic	4000 K	113	0.96	0.96	0.96	0.81	0.96	0.96
	non DIM	9.2	Opal	4000 K	114	0.95	0.95	0.95	0.81	0.95	0.95
	DALI-2	9.2	Microprismatic	4000 K	113	0.96	0.96	0.96	0.81	0.96	0.96
	DALI-2	9.2	Opal	4000 K	114	0.95	0.95	0.95	0.81	0.95	0.95
	non DIM	16.5	Opal	3000 K	103	0.59	0.59	0.59	0.50	0.59	0.59
	DALI-2	16.5	Opal	3000 K	103	0.59	0.59	0.59	0.50	0.59	0.59
	non DIM	16.5	Opal	4000 K	109	0.56	0.56	0.56	0.47	0.56	0.56
	DALI-2	16.5	Opal	4000 K	109	0.56	0.56	0.56	0.47	0.56	0.56
	DALI-2	17.3	Microprismatic	tunable white	102	0.57	0.57	0.57	0.48	0.57	0.57
	DALI-2	17.3	Opal	tunable white	104	0.56	0.56	0.56	0.47	0.56	0.56
VELA 450 direct/indirect soft surface	non DIM	16.7	Microprismatic	3000 K	127	0.47	0.47	0.47	0.40	0.47	0.47
	non DIM	16.7	Opal	3000 K	126	0.48	0.48	0.48	0.40	0.48	0.48
	DALI-2	16.7	Microprismatic	3000 K	127	0.47	0.47	0.47	0.40	0.47	0.47
	DALI-2	16.7	Opal	3000 K	126	0.48	0.48	0.48	0.40	0.48	0.48

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
	non DIM	16.7	Microprismatic	4000 K	134	0.45	0.45	0.45	0.38	0.45	0.45
	non DIM	16.7	Opal	4000 K	133	0.45	0.45	0.45	0.38	0.45	0.45
	DALI-2	16.7	Microprismatic	4000 K	134	0.45	0.45	0.45	0.38	0.45	0.45
	DALI-2	16.7	Opal	4000 K	133	0.45	0.45	0.45	0.38	0.45	0.45
	non DIM	29.3	Opal	3000 K	120	0.28	0.28	0.28	0.24	0.28	0.28
	DALI-2	29.3	Opal	3000 K	120	0.28	0.28	0.28	0.24	0.28	0.28
	non DIM	29.3	Opal	4000 K	127	0.27	0.27	0.27	0.23	0.27	0.27
	DALI-2	29.3	Opal	4000 K	127	0.27	0.27	0.27	0.23	0.27	0.27
	DALI-2	30	Microprismatic	tunable white	121	0.27	0.27	0.27	0.23	0.27	0.27
	DALI-2	30	Opal	tunable white	120	0.27	0.27	0.27	0.23	0.27	0.27
VELA 450 direct surface	non DIM	16.7	Microprismatic	3000 K	123	0.49	0.49	0.49	0.41	0.49	0.49
	non DIM	16.7	Opal	3000 K	123	0.49	0.49	0.49	0.41	0.49	0.49
	DALI-2	16.7	Microprismatic	3000 K	123	0.49	0.49	0.49	0.41	0.49	0.49
	DALI-2	16.7	Opal	3000 K	123	0.49	0.49	0.49	0.41	0.49	0.49
	non DIM	16.7	Microprismatic	4000 K	130	0.46	0.46	0.46	0.39	0.46	0.46
	non DIM	16.7	Opal	4000 K	130	0.46	0.46	0.46	0.39	0.46	0.46
	DALI-2	16.7	Microprismatic	4000 K	130	0.46	0.46	0.46	0.39	0.46	0.46
	DALI-2	16.7	Opal	4000 K	130	0.46	0.46	0.46	0.39	0.46	0.46
	non DIM	29.3	Opal	3000 K	117	0.29	0.29	0.29	0.25	0.29	0.29
	DALI-2	29.3	Opal	3000 K	117	0.29	0.29	0.29	0.25	0.29	0.29
	non DIM	29.3	Opal	4000 K	123	0.28	0.28	0.28	0.23	0.28	0.28
	DALI-2	29.3	Opal	4000 K	123	0.28	0.28	0.28	0.23	0.28	0.28
	DALI-2	30	Microprismatic	tunable white	117	0.28	0.28	0.28	0.24	0.28	0.28
	DALI-2	30	Opal	tunable white	117	0.28	0.28	0.28	0.24	0.28	0.28
VELA 450 direct/indirect power suspended	non DIM	21.1	Microprismatic	3000 K	129	0.37	0.37	0.37	0.31	0.37	0.37
	non DIM	21.1	Opal	3000 K	129	0.37	0.37	0.37	0.31	0.37	0.37
	DALI-2	21.1	Microprismatic	3000 K	129	0.37	0.37	0.37	0.31	0.37	0.37
	DALI-2	21.1	Opal	3000 K	129	0.37	0.37	0.37	0.31	0.37	0.37
	non DIM	21.1	Microprismatic	4000 K	137	0.35	0.35	0.35	0.29	0.35	0.35
	non DIM	21.1	Opal	4000 K	136	0.35	0.35	0.35	0.29	0.35	0.35
	DALI-2	21.1	Microprismatic	4000 K	137	0.35	0.35	0.35	0.29	0.35	0.35
	DALI-2	21.1	Opal	4000 K	136	0.35	0.35	0.35	0.29	0.35	0.35
	non DIM	35	Opal	3000 K	124	0.23	0.23	0.23	0.20	0.23	0.23

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
	DALI-2	35	Opal	3000 K	124	0.23	0.23	0.23	0.20	0.23	0.23
	non DIM	35	Opal	4000 K	131	0.22	0.22	0.22	0.19	0.22	0.22
	DALI-2	35	Opal	4000 K	131	0.22	0.22	0.22	0.19	0.22	0.22
	DALI-2	**36**	Microprismatic	tunable white	123	0.22	0.22	0.22	0.19	0.22	0.22
	DALI-2	36	Opal	tunable white	123	0.23	0.23	0.23	0.19	0.23	0.23
VELA 450 direct suspended	non DIM	16.7	Microprismatic	3000 K	123	0.49	0.49	0.49	0.41	0.49	0.49
	non DIM	16.7	Opal	3000 K	123	0.49	0.49	0.49	0.41	0.49	0.49
	DALI-2	16.7	Microprismatic	3000 K	123	0.49	0.49	0.49	0.41	0.49	0.49
	DALI-2	16.7	Opal	3000 K	123	0.49	0.49	0.49	0.41	0.49	0.49
	non DIM	16.7	Microprismatic	4000 K	130	0.46	0.46	0.46	0.39	0.46	0.46
	non DIM	16.7	Opal	4000 K	130	0.46	0.46	0.46	0.39	0.46	0.46
	DALI-2	16.7	Microprismatic	4000 K	130	0.46	0.46	0.46	0.39	0.46	0.46
	DALI-2	16.7	Opal	4000 K	130	0.46	0.46	0.46	0.39	0.46	0.46
	non DIM	29.3	Opal	3000 K	117	0.29	0.29	0.29	0.25	0.29	0.29
	DALI-2	29.3	Opal	3000 K	117	0.29	0.29	0.29	0.25	0.29	0.29
	non DIM	29.3	Opal	4000 K	123	0.28	0.28	0.28	0.23	0.28	0.28
	DALI-2	29.3	Opal	4000 K	123	0.28	0.28	0.28	0.23	0.28	0.28
	DALI-2	30	Microprismatic	tunable white	117	0.28	0.28	0.28	0.24	0.28	0.28
	DALI-2	30	Opal	tunable white	117	0.28	0.28	0.28	0.24	0.28	0.28
VELA 600 direct/indirect soft surface	non DIM	30	Microprismatic	3000 K	136	0.24	0.24	0.20	0.24	0.24	0.17
	non DIM	30	Opal	3000 K	135	0.24	0.24	0.21	0.24	0.24	0.17
	DALI-2	30	Microprismatic	3000 K	136	0.24	0.24	0.20	0.24	0.24	0.17
	DALI-2	30	Opal	3000 K	135	0.24	0.24	0.21	0.24	0.24	0.17
	non DIM	30	Microprismatic	4000 K	144	0.23	0.23	0.19	0.23	0.23	0.16
	non DIM	30	Opal	4000 K	143	0.23	0.23	0.19	0.23	0.23	0.16
	DALI-2	30	Microprismatic	4000 K	144	0.23	0.23	0.19	0.23	0.23	0.16
	DALI-2	30	Opal	4000 K	143	0.23	0.23	0.19	0.23	0.23	0.16
	non DIM	47	Opal	3000 K	128	0.17	0.17	0.14	0.17	0.17	0.12
	DALI-2	47	Opal	3000 K	128	0.17	0.17	0.14	0.17	0.17	0.12
	non DIM	47	Opal	4000 K	135	0.16	0.16	0.13	0.16	0.16	0.11
	DALI-2	47	Opal	4000 K	135	0.16	0.16	0.13	0.16	0.16	0.11
	DALI-2	51	Microprismatic	tunable white	128	0.15	0.15	0.13	0.15	0.15	0.12
	DALI-2	51	Opal	tunable white	127	0.15	0.15	0.13	0.15	0.15	0.12

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
VELA 600 direct surface	non DIM	30	Microprismatic	3000 K	134	0.25	0.25	0.25	0.21	0.25	0.25
	non DIM	30	Opal	3000 K	132	0.25	0.25	0.25	0.21	0.25	0.25
	DALI-2	30	Microprismatic	3000 K	134	0.25	0.25	0.25	0.21	0.25	0.25
	DALI-2	30	Opal	3000 K	132	0.25	0.25	0.25	0.21	0.25	0.25
	non DIM	30	Microprismatic	4000 K	141	0.23	0.23	0.23	0.20	0.23	0.23
	non DIM	30	Opal	4000 K	140	0.24	0.24	0.24	0.20	0.24	0.24
	DALI-2	30	Microprismatic	4000 K	141	0.23	0.23	0.23	0.20	0.23	0.23
	DALI-2	30	Opal	4000 K	140	0.24	0.24	0.24	0.20	0.24	0.24
	non DIM	47	Opal	3000 K	125	0.17	0.17	0.17	0.14	0.17	0.17
	DALI-2	47	Opal	3000 K	125	0.17	0.17	0.17	0.14	0.17	0.17
	non DIM	47	Opal	4000 K	133	0.16	0.16	0.16	0.13	0.16	0.16
	DALI-2	47	Opal	4000 K	133	0.16	0.16	0.16	0.13	0.16	0.16
	DALI-2	51	Microprismatic	tunable white	125	0.16	0.16	0.16	0.13	0.16	0.16
	DALI-2	51	Opal	tunable white	124	0.16	0.16	0.16	0.13	0.16	0.16
VELA 600 direct/indirect power suspended	non DIM	44	Microprismatic	3000 K	137	0.17	0.17	0.17	0.14	0.17	0.17
	non DIM	44	Opal	3000 K	136	0.17	0.17	0.17	0.14	0.17	0.17
	DALI-2	44	Microprismatic	3000 K	137	0.17	0.17	0.17	0.14	0.17	0.17
	DALI-2	44	Opal	3000 K	136	0.17	0.17	0.17	0.14	0.17	0.17
	non DIM	44	Microprismatic	4000 K	145	0.16	0.16	0.16	0.13	0.16	0.16
	non DIM	44	Opal	4000 K	144	0.16	0.16	0.16	0.13	0.16	0.16
	DALI-2	44	Microprismatic	4000 K	145	0.16	0.16	0.16	0.13	0.16	0.16
	DALI-2	44	Opal	4000 K	144	0.16	0.16	0.16	0.13	0.16	0.16
	non DIM	66	Opal	3000 K	131	0.12	0.12	0.12	0.10	0.12	0.12
	DALI-2	66	Opal	3000 K	131	0.12	0.12	0.12	0.10	0.12	0.12
	non DIM	66	Opal	4000 K	139	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	66	Opal	4000 K	139	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	62	Microprismatic	tunable white	132	0.12	0.12	0.12	0.10	0.12	0.12
	DALI-2	62	Opal	tunable white	131	0.12	0.12	0.12	0.10	0.12	0.12
VELA 600 direct suspended	non DIM	30	Microprismatic	3000 K	134	0.25	0.25	0.25	0.21	0.25	0.25
	non DIM	30	Opal	3000 K	132	0.25	0.25	0.25	0.21	0.25	0.25
	DALI-2	30	Microprismatic	3000 K	134	0.25	0.25	0.25	0.21	0.25	0.25
	DALI-2	30	Opal	3000 K	132	0.25	0.25	0.25	0.21	0.25	0.25
	non DIM	30	Microprismatic	4000 K	141	0.23	0.23	0.23	0.20	0.23	0.23
	non DIM	30	Opal	4000 K	140	0.24	0.24	0.24	0.20	0.24	0.24
	DALI-2	30	Microprismatic	4000 K	141	0.23	0.23	0.23	0.20	0.23	0.23
	DALI-2	30	Opal	4000 K	140	0.24	0.24	0.24	0.20	0.24	0.24

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
	non DIM	47	Opal	3000 K	125	0.17	0.17	0.17	0.14	0.17	0.17
	DALI-2	47	Opal	3000 K	125	0.17	0.17	0.17	0.14	0.17	0.17
	non DIM	47	Opal	4000 K	133	0.16	0.16	0.16	0.13	0.16	0.16
	DALI-2	47	Opal	4000 K	133	0.16	0.16	0.16	0.13	0.16	0.16
	DALI-2	51	Microprismatic	tunable white	125	0.16	0.16	0.16	0.13	0.16	0.16
	DALI-2	51	Opal	tunable white	124	0.16	0.16	0.16	0.13	0.16	0.16
VELA 900 direct ceiling	DALI-2	67	Microprismatic	3000 K	134	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	67	Opal	3000 K	134	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	67	Microprismatic	4000 K	142	0.10	0.10	0.10	0.09	0.10	0.10
	DALI-2	67	Opal	4000 K	142	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	73	Microprismatic	tunable white	129	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	73	Opal	tunable white	129	0.11	0.11	0.11	0.09	0.11	0.11
VELA 900 direct/indirect power suspended	DALI-2	96	Microprismatic	3000 K	140	0.07	0.07	0.07	0.06	0.07	0.07
	DALI-2	96	Opal	3000 K	140	0.07	0.07	0.07	0.06	0.07	0.07
	DALI-2	96	Microprismatic	4000 K	148	0.07	0.07	0.07	0.06	0.07	0.07
	DALI-2	96	Opal	4000 K	148	0.07	0.07	0.07	0.06	0.07	0.07
	DALI-2	105	Microprismatic	tunable white	135	0.07	0.07	0.07	0.06	0.07	0.07
	DALI-2	105	Opal	tunable white	135	0.07	0.07	0.07	0.06	0.07	0.07
VELA 900 direct suspended	DALI-2	67	Microprismatic	3000 K	134	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	67	Opal	3000 K	134	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	67	Microprismatic	4000 K	142	0.10	0.10	0.10	0.09	0.10	0.10
	DALI-2	67	Opal	4000 K	142	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	73	Microprismatic	tunable white	129	0.11	0.11	0.11	0.09	0.11	0.11
	DALI-2	73	Opal	tunable white	129	0.11	0.11	0.11	0.09	0.11	0.11
VELA 1200 direct ceiling	DALI-2	147	Microprismatic	3000 K	132	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	147	Opal	3000 K	132	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	147	Microprismatic	4000 K	140	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	147	Opal	4000 K	140	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	159	Microprismatic	tunable white	128	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	159	Opal	tunable white	129	0.05	0.05	0.05	0.04	0.05	0.05
VELA 1200 direct/indirect power suspended	DALI-2	185	Microprismatic	3000 K	136	0.04	0.04	0.04	0.03	0.04	0.04
	DALI-2	185	Opal	3000 K	136	0.04	0.04	0.04	0.03	0.04	0.04

Additional environmental information

Variant	Control	Power [W]	Optic	CCT	lm/W	A1-A3	A4	A5	B6	C1-C4	D
	DALI-2	185	Microprismatic	4000 K	144	0.04	0.04	0.04	0.03	0.04	0.04
	DALI-2	185	Opal	4000 K	144	0.04	0.04	0.04	0.03	0.04	0.04
	DALI-2	199	Microprismatic	tunable white	132	0.04	0.04	0.04	0.03	0.04	0.04
	DALI-2	199	Opal	tunable white	132	0.04	0.04	0.04	0.03	0.04	0.04
VELA 1200 direct suspended	DALI-2	147	Microprismatic	3000 K	132	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	147	Opal	3000 K	132	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	147	Microprismatic	4000 K	140	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	147	Opal	4000 K	140	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	159	Microprismatic	tunable white	128	0.05	0.05	0.05	0.04	0.05	0.05
	DALI-2	159	Opal	tunable white	129	0.05	0.05	0.05	0.04	0.05	0.05

Information related to the sectorial EPD

This EPD is not sectoral.

Version History

Original version of the EPD (2026-09-17).

Abbreviations

ADPE – Abiotic depletion potential non-fossil resources
ADPF – Abiotic depletion potential fossil resources
AP – Acidification potential. accumulated exceedance
AUT – Austria
CB – Certification Body
CRU – Components for re-use
d/i – direct / indirect
DALI – Digital Adressable Lighting Interface
EEE – Exported electrical energy
EET – Exported thermal energy
EPD – Environmental Product Declaration
EP-freshwater – Eutrophication potential freshwater
EP-marine – Eutrophication potential marine
EP-terrestrial – Eutrophication potential terrestrial
ETP-fw – Eco toxicity freshwater
FW – Net use of fresh water
GLO – Global
GWP-biogenic – Global warming potential biogenic
GWP-fossil – Global warming potential fossil fuels
GWP-GHG – Global warming potential
GWP-luluc – Global warming potential land use and land use change
GWP-total – Global warming potential total
HTTP-c – Human toxicity. cancer effect
HTTP-nc – Human toxicity. non-cancer effects
HWD – Hazardous waste disposed
IRP – Ionizing radiation. human health
LCA – Life Cycle Assessment
MER – Materials for energy recovery
MFR – Materials for recycling
NHWD – Non–harzardous waste disposed
NRSF – Use of non–renewable secondary fuels
ODP – Depletion potential of the stratospheric ozone layer
PCR – Product Category Rules
PENRE – Use of non renewable primary energy as energy carrier
PENRM – Use of non renewable primary energy resources used as raw materials
PENRT – Total use of non renewable primary energy resource
PERE – Use of renewable primary energy as energy carrier
PERM – Use of renewable primary energy resources used as raw materials
PERT – Total use of renewable primary energy
PM – Particulate matter emissions
PMMA – Polymethylmetacrylate
POCP – Photochemical ozone creation potential
PSR – Product Specific Rules
RE – Renewable Energy
RSF – Use of renewable secondary fuels
RWD – Radioactive waste disposed
SLO – Slovenia
SM – Use of secondary material
SQP – Land use related impacts/Soil quality
UN CPC – United Nations Central Product Classification
WDP – Water (user) deprivation potential

References

CuPower LED-Driver – data – EPD : https://www.cupower.com/theproducts_7/ID_CCCB_44_230_500-1050_DT8_NFC_FV1.html

EN 15804:2012+A2:2019 /AC:2021 Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products.

EN 15193:2007 Energy performance of buildings - Energy requirements for lighting

European court of auditors. EU actions and existing challenges on electronic waste. Review No. 4. 2021

General Programme Instructions of the International EPD® System. Version 5.0.1.

ISO 14020:2000 – Environmental labels and declarations – General principles

ISO 14025:2006 - Environmental labels and declarations - Type III environmental declarations - Principles and procedures

ISO 14040:2021 Environmental management – Life cycle assessment – Principles and framework

ISO 14044:2021 Environmental management – Life cycle assessment – Requirements and guidelines

LCA Background Report, VELA ceiling / surface / suspended 2026-09-02

LCA for Experts 10.9.6.1

PCR-ed4-EN-2021 09 062021 P.E.P. Association. Product Category Rules for Electrical. Electronic and HVAC-R Products.

Product category rules (PCR) 2019:14 Construction products version 2.0.1, 2025-06-05. The EPD International, 2025

PSR-0014-ed2.0-EN-2023 07 13. PSR SPECIFIC RULES FOR LUMINAIRES. According to PSRmodele-ed2-EN-2021 11 18.

Smart EPD Part A Product Category Rules For Building And Construction Products and Services, Standard 1000, version 1.2 @Smart EPD, March 14, 2025

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